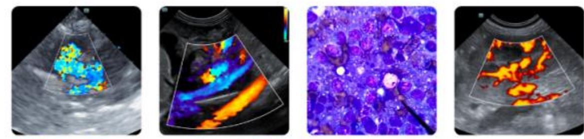


PATIENT

Bella Rose Sovter

SPECIES

Canine

BREED

Havanese

SEX

Spayed Female

AGE

11 Years 9 Months

WEIGHT

9.5 pounds

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

IMAGING PERFORMED BY

Shari Reffi CVT

HOSPITAL NAME

William Penn Veterinary Hospital

REFERRING VET

Dr. Mahmoud

INVOICE

15392

DATE

04/23/26

PRESENTING CLINICAL SIGNS

Enlarged heart, grade 5/6 heart murmur. Pre echo-DMVD stage B2. Current Medications: Enalapril 2.5 sid

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

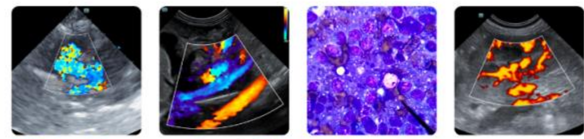
CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	5.6	2.3	NM	1.9	35	70	0.2
CANINE CARDIAC PARAMETERS	**HR** (BPM)	**AV VMAX** (m/s)	**PV MAX** (m/s)	**BODY WEIGHT** (lbs)	**LAD** LA MAX 4 Chamber	**LVIDd** Avg; 2D and m-mode short axis (cm)	**LVIDs** Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	152	1.2	0.7	9.5	3.5	3.3	--

Cardiac Presentation

The echocardiogram in this patient demonstrated moderate increased **left atrial** dimension based on 2 different LA measurement methods with mild intra-atrial septal deviation. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis. (anterior greater than posterior) with mild valvular prolapse. Doppler indicated measurable significant eccentric MR. The **left ventricle** presented thicknesses with linear contour and moderate increased LV dimension and mild increased sphericity. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated mild thickening with TR on doppler. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible. No evidence of arrhythmia.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (B2).
- Tricuspid valve insufficiency- no overt clinical pulmonary hypertension.



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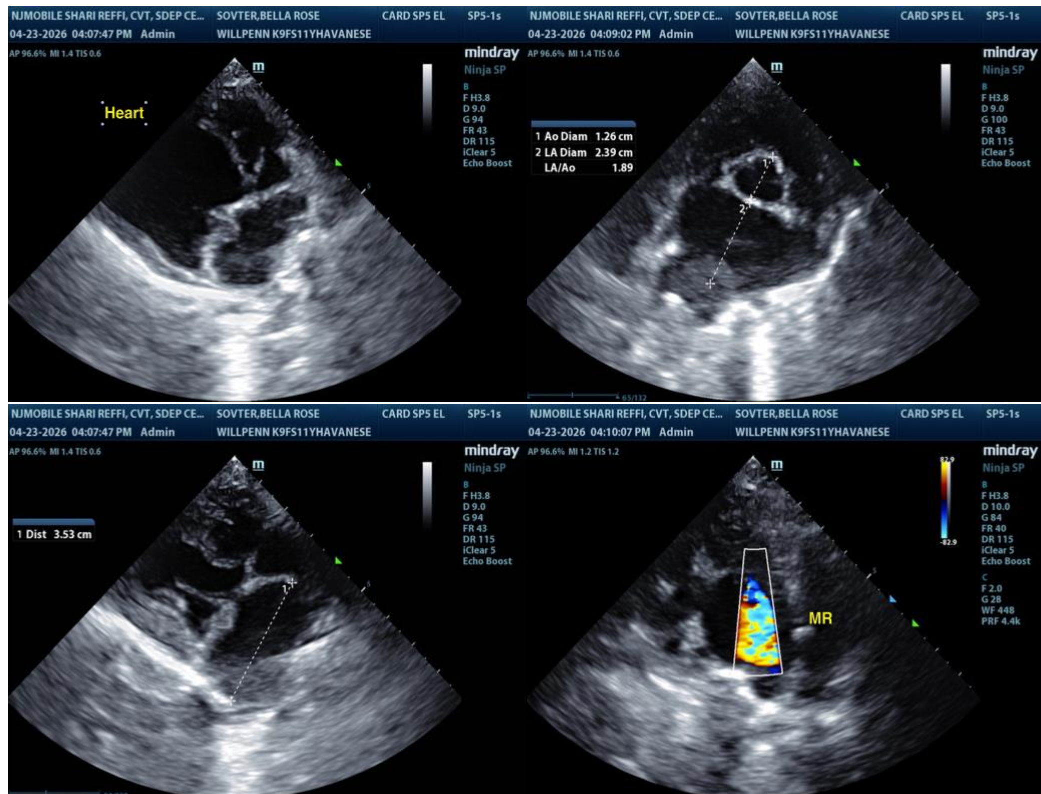
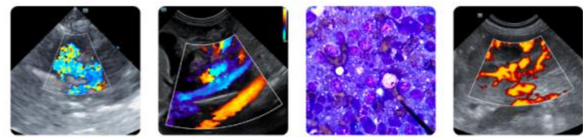
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The degree of LA/LV enlargement indicates the risk of complication secondary to mitral valve insufficiency is at least moderately elevated with evidence of potential impending left heart volume overload.

Pimobendan at 0.3 mg/kg BID is recommended. Serial monitoring of resting respiration rate going forward is advised. If elevated resting respiration rate without overt evidence of radiographic pulmonary edema, weak diuretic spironolactone 1.0 to 2.0 mg/kg PO BID is recommended. Omega fatty acid supplementation and mild salt restriction may prove beneficial. Continuous ACE inhibitor is warranted if systemic BP is greater than 130. Anesthetic risk is at least moderate.

Pimobendan for three to five days is recommended prior to potential anesthesia. If anesthesia is elected, the following protocol is recommended with close clinical monitoring, judicious IV fluid administration and limited anesthetic time. Recheck echo is recommended in four to six months, sooner if progressive clinical signs. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.





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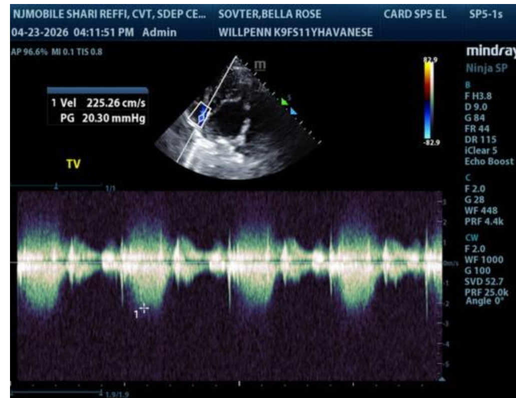

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com